

DESCRIPTION OF ADOPTION BEHAVIOUR DETECTED IN THE MEDITERRANEAN MONK SEAL (*MONACHUS MONACHUS*) AT THE COLONY OF THE CABO BLANCO PENINSULA (MAURITANIA-MOROCCO)



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INTRODUCTION

Mediterranean monk seals are in critical danger of extinction. The population was thought to number approximately less than 500 in recent years (1 and 2). The largest aggregation known that still keeps a colonial structure is located at the Cabo Blanco peninsula (Mauritania-Morocco). Since 1994, a conservation project is being developed in this colony.

Over the 80% of births occur into the two principal caves that seals use to haul-out and breed, (3 and 4). Females give birth one pup per year. Since 2003 almost all births take place between spring and autumn, with a peak in September (9).

Just after birth a recognition mother-pup that is keep in time, is established. It involves vocalizations, nosing and physical contact. Maternal care is well developed until weaning, which is gradual at around 4 months, the longest known for phocids. The mother expends the first week with its pup, afterwards she begins to perform periodic feeding trips to the sea. Consequently, the pup rests alone for long periods of time (5 and 6).

Fostering behaviour is surprisingly common among pinnipeds, especially among phocids (8). Even though some previous studies (3 and 5) described these types of behavior in a general way, here there are described and defined in a more detailed manner.



The ventral patch design is different and exclusive for each animal



Mother with her less than two month old pup.

RESULTS

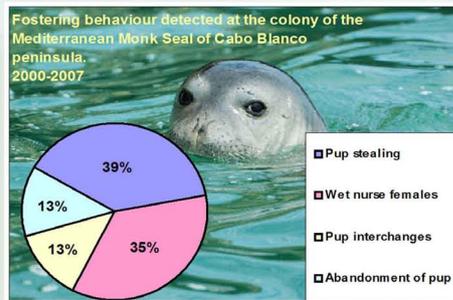
From 2000 to 2007, 253 pups there have been monitored with an annual average effort of 607, 45 hours. The couples mother-pup monitored, 69 Ad Libitum have been taken. 37 pups (14, 62 %) and 21 females (35, 59% of the 59 females catalogued until 2007) were involved.

Of all the Ad Libitum, a 39% described pup stealing; 35%, adoptions by wet nurse; 13%, pup interchange, and 13% of the data belonged to abandoned pups.

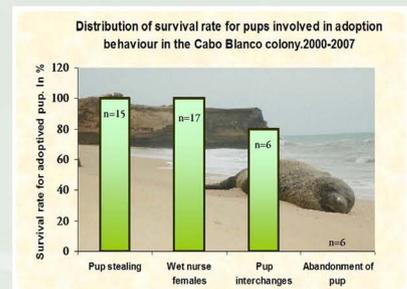
From all the cases there are two to be highlighted: One mother that adopted a pup of few days of age while she was raising her own of more than two months. The second case, a mother that had lost her own pup allowed the suckling of 7 different alien pups without adopting any permanently.

In various cases, pups have finished their development suckling from two mothers, the own and the adoptive one.

The survival of these adopted pups oscillated between 100% and 80% depending of the type of behaviour. No abandoned pup survived.



Monitoring with closed circuit TV inside of the cave.



CONCLUSIONS

-Pup stealing is the type of fostering behaviour more frequent detected at the colony of Cabo Blanco.

-Fostering behaviours seem to be favourable for the survival of the pups involved.

-The females that let to suckle to alien pups at the same time they raise their own, accept this kind of adoption and keep it in time.

-The studied mothers that have abandon their pup are not first-time mother. The reasons why these mothers abandon their pup and why other mothers do not want to adopt are not know.

-A more detailed study of the adoption behaviour of this species is necessary to get a better understanding of its breeding biology for the forthcoming management, handle and protection of its populations.

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Female with her juvenile pup

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